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REMARKS

Claims 1 – 24 are pending in the present application. Claims 12 – 24 have been cancelled, Claims 1, 7, and 8 have been amended, Claims 25 – 33 have been added, leaving Claims 1 – 11 and 25 – 33 for consideration upon entry of the present Amendment.

The Specification has been amended to correct certain typographical errors and for consistency of language in the specification and with the claims. Support for the amendment to page 3 can at least be found in Claim 4 as originally filed.

Claims 25 – 33 have been added to further claim the invention. Support for these claims can at least be found in claims 1 and 8 as originally filed, as well as in the specification on page 3, lines 16 – 27, page 4, lines 9 – 25, and page 8, lines 1 – 13.

No new matter has been introduced by these amendments and new claims. Reconsideration and allowance of the claims are respectfully requested.

Acknowledgement of the acceptability of the drawings is hereby requested.

Claim Rejections Under 35 U.S.C. § 112, Second Paragraph

Claims 1 – 11 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 7, and 8 have been amended for clarity, thereby rendering these rejections moot.

With respect to the rejection of “between about”, the basis for the indefiniteness rejections based on the term “about” seems to be founded in *Amgen, Inc. vs. Chugai Pharmaceutical Co.*, 927 F2d 1200, 18 USPQ2d 1016 (Fed. Cir. 1991))” (hereinafter *Amgen*). However, the facts and issues present in *Amgen* are not applicable to the instant application.

Amgen involved an appeal of a district court decision in which claims of a U.S. Patent were held invalid as being indefinite for inclusion of the limitation “at least about 160,000” in relation to an ‘activity’ determined by a bioassay relied upon in the claim.

According to the Court:

The District Court found that “bioassays provide an imprecise form of

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measurement with a range of error" and that use of the term "about" 160,000 IU/AU, coupled with the range of error already inherent in the specific activity limitation, served neither to distinguish the invention over the close prior art... nor to permit one to know what specific activity values... if any, might constitute infringement.

(*Id* at 1219)

Further, the Court noted that the statute requires:

[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

and that:

[a] decision as to whether a claim is invalid under this provision requires a determination whether those skilled in the art would understand what is claimed. *See Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 624, 625, 225 USPQ 634 641 (Fed. Cir. 1985) (Claims must "reasonably apprise those skilled in the art" as to their scope and be "as precise as the subject matter permits.").

In affirming the District Court ruling, the Court agreed that because the term "about" in this instance "gives no hint as to which mean value...constitutes infringement", the term "at least about" renders the claims to be invalid for indefiniteness. However, in arriving at this conclusion the Court also cautioned:

our holding that the term "about" renders indefinite claims 4 and 6 should not be understood as ruling out any and all uses of this term in patent claims. It may be acceptable in appropriate fact situations, e.g., *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1557, 220 USPQ 303, 316 (Fed Cir. 1983) ("use of 'stretching... at a rate exceeding about 10% per second' in the claims is not indefinite"), even though it is not here.

The facts of *Amgen* are not applicable to the instant rejection. In *Amgen* the uncertainty in defining the limitation at issue is borne of the error inherent in the test itself. In the present situation, however, the limitation recited in the claims, e.g., "a temperature between about" is directed to the measurement of a temperature. The recited measurement is specific and clearly understood. Unlike the bioassay at issue in *Amgen*, temperature measurement does not carry the same or a similar level of uncertainty as to the result. Similar to a measurement of time, the

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measurement of temperature is definite. In *W.L. Gore & Assocs., Inc. v. Garlock, Inc.* it was noted that the term "exceeding about 10% per second could clearly be assessed through the use of a stopwatch."(emphasis added) and the mere inclusion of "about" does not render a claim invalid.

Thus, given the precision and accuracy with which one skilled in the art can determine temperature, those skilled in the art would certainly understand the limitations recited in the claims. These claims reasonably apprise one skilled in the art as to the scope, i.e., the "metes and bounds" of the claimed invention, in as precise a term as is required by 35 U.S.C. §112, second paragraph. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1 – 11 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over WO 00/21631 to Nazzer in view of EP 0098038 to Morgan. Applicants respectfully traverse this rejection.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness, i.e., that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

The Examiner relies upon Nazzer to "substantially" disclose the claimed process with the claimed parameters allegedly being result effective variables, and relies upon Morgan to teach a temperature range with the "obviousness" to combine being based upon Morgan's suggestion to operate "the process over a wide range of temperature in the evaporation of water." (Office Action, pages 3 – 4). Applicants respectfully disagree that Nazzer substantially discloses the presently claimed process, that the process variables are result effective, and that a combination of Nazzer and Morgan is obvious.

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Firstly, Nazzer is handling different materials than the present invention.

The feed stream 2 is a free flowing mixture of two or more miscible liquids that contain solids (dissolved solids and/or undissolved solids). One or more of the liquid component(s) boils at a significantly higher temperature than the other liquid components. Examples of such mixtures include engine coolant/water, methanol/water, amines/water, and light oil/heavy oil mixtures...

(Page 4, lines 25 – 31) Nazzer specifically states that his process:

is not intended to apply to feed streams that contain significant quantities of solids, which solids;

- float or have densities that are close to or below the density of the heavier feed stream liquid(s); agglomerate or coagulate into very large clumps that cannot pass through the pipework at the bottom exit of the flash separator;
- adhere firmly to the walls of the flash separator and solids drum;....

(Page 15, lines 14 – 25) In other words, Nazzer's process is not intended for use to process brine.

Additionally, Nazzer at least fails to teach "decreasing the pressure of the heated brine during re-introduction of the pressurized, heated brine by an amount effective to transform at least a portion of water from the brine from liquid to steam" as is taught and claimed in the present application. Hence, Nazzer fails to teach all of the elements of the present claims.

Furthermore, there is no motivation or expectation of success to modify Nazzer to have the presently claimed pressure reduction since the recycle liquor of Nazzer is introduced into the tank in a liquid form and through a tangential nozzle so that the recycle liquor can rotate around the vessel at high velocity and can contact the feed liquid, to cause flashing of the feed liquid.

The feed stream 2 mixes with a larger and hotter stream of recycle liquor 6 that has entered the flash separator 3 at high velocity in the same rotational direction as the feed stream 2, as illustrated in Figure 1a. The recycle liquor 6 enters the flash separator through one or more tangential nozzles (not shown). The recycle liquor 6 preferably immediately heats the feed stream 2 and thereby causes the feed stream to boil rapidly or flash... The vapour 7 generated by the flashing feed stream 2 expands to fill the annular chamber 5...

(Page 5, line 23 – 6, line 4) Nazzer is a different process, with different parameters, and different materials. The present application is non-obvious in view of Nazzer.

Morgan is then relied upon to teach temperatures in the evaporation of water. (Office Action, page 4) Morgan, however, fails to cure the deficiencies of Nazzer or to provide any

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motivation to combine with Nazzer. For example, as with Nazzer, Morgan at least fails to teach "decreasing the pressure of the heated brine during re-introduction of the pressurized, heated brine by an amount effective to transform at least a portion of water from the brine from liquid to steam" as is taught and claimed in the present application. Additionally, with respect to the suggested combination by the Office Action, since Nazzer teaches the recycle being a liquid, and the flashing is upon contact of the hot recycle liquor with the feed stream, there is no motivation and no expectation of success to heat the recycle liquor to temperatures of about 220°F to about 230°F, as is claimed in the present application. (Claim 25)

Regarding a tangential nozzle and a fog nozzle, these are not equivalents as suggested in the Office Action and none of the references of record teach or suggest the use of a fog nozzle. Support for the Examiner's position is respectfully requested.

Considering that Nazzer teaches a different process from that claimed in the present application, teaches away from their process being used to treat brine, and fail to teach decreasing the pressure as claimed in the present application, Nazzer fails to render the present application obvious. Additionally, since there is no motivation or expectation of success to combine Nazzer and Morgan, and since, even combined, the combination fails to remedy the deficiencies of Nazzer, Nazzer in view of Morgan also fails to render the present application obvious. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 4 stands rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Nazzer in view of to Morgan, and further in view of U.S. Patent No. 5,389,208 to Beasley et al. Applicants respectfully traverse this rejection.

As stated above, Nazzer and Morgan, alone and in combination, fail to render the present claims obvious. Beasley et al. fail to remedy the deficiencies of Nazzer and Morgan. For example, Beasley et al., at least fail to teach or suggest "decreasing the pressure of the heated brine during re-introduction of the pressurized, heated brine by an amount effective to transform at least a portion of water from the brine from liquid to steam" as is taught and claimed in the present application. Additionally, there is no motivation to combine Beasley et al., with Nazzer considering they teach a different process using a high vacuum to form a vapor. (Abstract) For at least these reasons, Nazzer, alone, and in view of Morgan and Beasley et al., fail to render the

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present claims obvious. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim 8 stands rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Nazzer in view of to Morgan, and further in view of U.S. Patent No. 4,767,498 to Kreisler. Applicants respectfully traverse this rejection.

As stated above, Nazzer and Morgan, alone and in combination, fail to render the present claims obvious. As with Beasley et al., Kreisler fails to remedy the deficiencies of Nazzer and Morgan. For example, Kreisler, at least fail to teach or suggest "decreasing the pressure of the heated brine during re-introduction of the pressurized, heated brine by an amount effective to transform at least a portion of water from the brine from liquid to steam". Additionally, there is no motivation to combine Kreisler with Nazzer considering that they teach a different process. Kreisler teaches:

Photographic waste solution is treated by a method which comprises contacting the waste solution with air, in an especially designed treatment vessel, at a solution temperature of from about 120°F. to about 140°F. The air thus becomes supersaturated with the liquid in the waste, and the waste solution is thus concentrated to form a waste slurry which is transferred out into a waste storage vessel. The supersaturated air which is virtually free from waste is discharged to the atmosphere. The method is carried out in an especially constructed apparatus comprising a uniquely designed treatment vessel.

(Abstract)

For at least the reasons that there is no motivation to combine Nazzer with Morgan and/or Kreisler, and since Kreisler fails to remedy the deficiencies of Nazzer, Nazzer, alone, and in view of Morgan and Kreisler, fail to render the present claims obvious. Reconsideration and withdrawal of this rejection are respectfully requested.

It is further noted that the new claims, Claims 25 – 33 are non-obvious over Nazzer in view of Morgan and further in view of Kreisler or Beasley et al. For example, none of these references teach the claimed process comprising "decreasing the pressure of the heated brine during introduction of the heated brine into the tank by an amount effective to transform at least a portion of the heated brine to steam" as is claimed in the present application. It is additionally noted that all of these references fail to teach the filtering processes claimed in the present application, e.g., the use of a filter press and shaker system.

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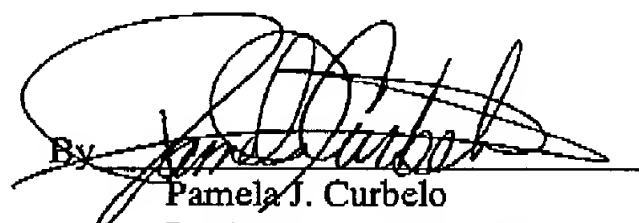
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It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should be allowable to Applicants. Accordingly, reconsideration and withdrawal of the rejections and allowance of the case are requested. Should the Examiner have any questions or otherwise, the Examiner is invited to call the undersigned to facilitate prosecution of the present application.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

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Date: July 13, 2004